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NH

## NASSAUX-HEMSLEY, INCORPORATED-CONSULTANTS

NHI BUILDING - 56 NORTH SECOND STREET CHAMBERSBURG, PENNSYLVANIA 17201

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September 10, 1975

Mr. Edward Simmons  
Solid Waste Director  
1002 Health and Welfare Building  
Harrisburg, Pennsylvania 17120

Re: Keystone Sanitation Company  
Union Township; Adams County  
#70-773

Dear Mr. Simmons:

The purpose of this letter is to report to you the current status of the engineering of the captioned site.

If you will recall some months ago, we proposed to the Department a method of applying a measure that would supplement the attenuation capacity of weathered shale. The reason for the proposal was that it was found, as a result of our subsurface investigation of the site, that the weathered shale horizon was largely unpredictable. This posed design and operational problems for the site as a facility employing natural attenuation of the soils. The method outlined was to use bentonite as an admixture to the base of the landfill, and the purpose of the meeting was to determine if the Department would be interested in the idea. The consensus of opinion after the meeting was that the proposal did have merit enough to proceed with a laboratory study of the effects of the admixture on native leachate.

After the meeting, we undertook the initial steps to the study by having such a mixture tested for quality. Unfortunately, though we were assured otherwise, the laboratory failed to carry through with the testing program; consequently, our timetable has been delayed.

We will shortly undertake an expanded testing program as outlined on the attached page.

In addition, the operator had 30 tons of Volclay SG-40 delivered to the site to seal the top of a portion of the finished landfill. The purpose of this experiment is to determine the practicality of decreasing the infiltration of rain fall and generation of leachate. Due to recent rainy spells he has not been able to complete the fine

grading of the surface to be treated; however, he will be applying the bentonite to the top surface of part of the landfill as soon as possible. We anticipate that the surface treatment will eliminate the possibility of any leachate seeps from developing along the toe of the landfill.

Thank you for your consideration. We will continue to keep you informed of what progress is being made on this project.

Very truly yours,

NASSAUX - HEMSLEY, INCORPORATED

Wallace C. Koster

Wallace C. Koster, Geologist  
Principle - Solid Waste Division

WCK:gd

CC: Mr. Kenneth Noel, President  
Keystone Sanitation Co.

Enclosure

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